

AIR DATA DISPLAY

RVSM TYPE AD32

THOMMEN
AIRCRAFT EQUIPMENT



OVERVIEW

✓ INTEGRATED DESIGN

Digital air data computer incorporated into electronic encoding CDP altimeter with altitude alerter

✓ COMPLIANCE WITH HIGHEST CERTIFICATION STANDARDS

TSO-C106 (air data computer) / TSO-C10b (altimeter) / TSO-C88a (altitude encoder) / DO-160D / DO-178B Level A

✓ EASY INSTALLATION

Several case design options (ARINC408, 3 ATI), rugged design, variety of pneumatic adapters and installation kits

✓ PERFECT AVIONICS SYSTEM INTEGRATION

Extensive computation of flight relevant data provided per configurable ARINC429 and analogue in-/outputs

✓ INTEGRATION INTO COCKPIT LIGHTING SCHEME:

5V or 28V, white/red/NVIS green, customizable dimming curve

✓ HIGHEST ACCURACY

Optionally RVSM compliant, max scale error below FL200: 10ft (3m)

✓ SUPPORTING SPECIAL OPERATIONS

Baro setting 700 – 1050mbar, Baro push-to-reset, configurable altitude alerter, optionally NVIS compliant

✓ MINIMUM TOTAL COST OF OWNERSHIP

No re-calibration required, 21'000 hrs MTBF

PARAMETERS

* □/○ □ Output
○ ARINC429 accuracy met

Label 203	Pressure Altitude	- 1,000	to	+53,000	feet
Label 204/220	Baro Corrected Altitude	- 1,000	to	+53,000	feet
Label 212	Vertical Speed	0	to	20,000	ft/min.
Label 353	Indicated Airspeed IAS	0/40*	to	450	knots
Label 206	Computed Airspeed CAS	0/40*	to	450	knots
Label 210	True Airspeed TAS	0/100*	to	599	knots
Label 207	Max. Allowable Airspeed VMO	150	to	450	knots
Label 205	MACH Number	0/0.200*	to	0.999	MACH
Label 211	Total Air Temperature	-60	to	+99	°C
Label 213	Static Air Temperature SAT	-99	to	+60	°C
Label 235/237	Baro Setting QNH	20.67	to	31.00	inHg
Label 234/236		700	to	1,050	mbar

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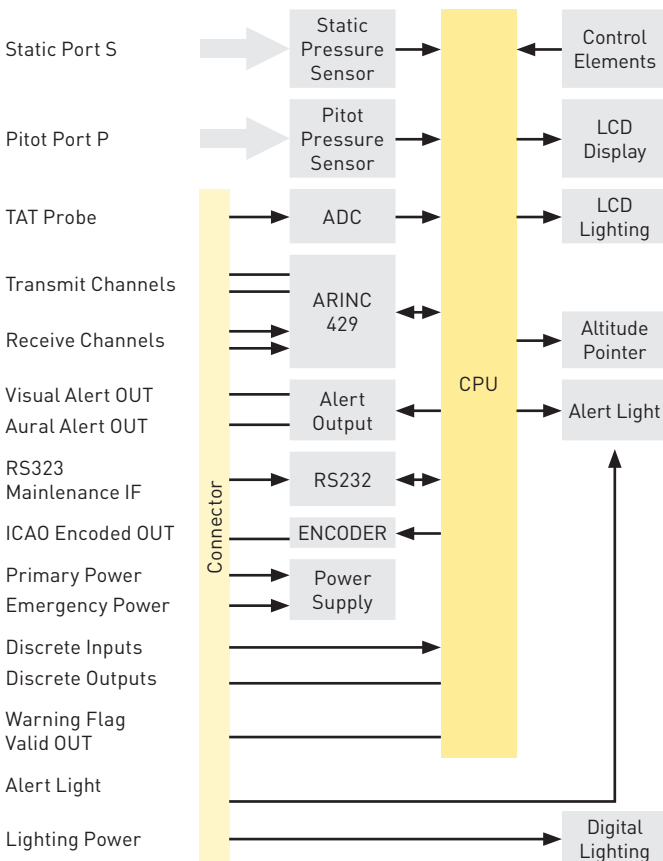


CHARACTERISTICS

FEATURES:	Solid State Pressure Sensors	SIGNAL OUTPUTS:	Encoded Altitude ICAO Per TSO C-88a
	RVSM Compliant		Visual/Aural Alert Relais Outputs
	Static Source Error Correction, 2 x 16 Curves		Warning Flag Valid GND/28 VDC
	Integrated Altitude Alerter (Optional)		Optional Baro Potentiometer Output
	Standby/Normal Operation (Optional)		ARINC 429 Serial Data Bus 2 Transmit Channels
	English/metric scale setting		
	Baro Push-to-Reset function		
	Push-to-Test and continuous Built-In-Test		
	BIT Failure memory		
	Display with LCD/stepper motor driven pointer		
SIGNAL INPUTS:	Primary Power 28 VDC	OPERATING SPECIFICATIONS:	Altitude Scale Error
	Emergency Power 28 VDC		- 1,000 to 20,000 feet ± 10 feet
	Lighting Power 28 VDC (Optional 5 VDC)		20,000 to 29,000 feet ± 20 feet
	Alert Lamp Power 28 VDC (Optional 5 VDC)		29,000 to 41,000 feet ± 30 feet
	ARINC 429 Serial Data Bus 2 Receive Channels		41,000 to 53,000 feet ± 50 feet
	TAT Probe 500 Ohm (Optional 50 Ohm)		FAA TSO-C10b/TSO-C88a/TSO-C106
	@ 0 °C		RTCA/DO-178B Level A
			RTCA/DO-160D
			- Operating Temperature -20 (-30 optional) ... 70 °C
			- Storage Temperature -55 ... 85 °C
	Reliability: MTBF 21,700 Hours (Acc. MIL-HDBK-217F)		

INTERNAL BLOCK DIAGRAM

AD32 RVSM Air Data Display with Alerter and Encoding Output



MECHANICAL DRAWING

